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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,646	11/21/2006	Hiroaki Mizushima	062338	8966

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EXAMINER	
CHAPEL, DEREK S	

ART UNIT	PAPER NUMBER
2872	

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12/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,646	MIZUSHIMA ET AL.	
	Examiner	Art Unit	
	DEREK S. CHAPEL	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *3/28/06,4/20/06,11/21/06,8/27/07,2/11/08*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date
See Continuation Sheet.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :3/28/06, 4/20/06, 8/27/07, 2/11/08.

DETAILED ACTION

Status Of Claims

1. Claims 1-12 are pending for examination as interpreted by the examiner.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement filed 4/20/2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered. It is further noted that the references in this information disclosure statement are duplicates of the references in the information disclosure statement dated 3/28/2006, which have been considered.

4. The Information Disclosure Statement(s) (IDS) filed on 3/28/2006, 8/27/2007 and 2/11/2008 were considered, except for reference 4,591,512 in the information disclosure statement dated 2/11/2008, which was previously considered in the information disclosure statement dated 8/27/2007.

Drawings

5. The drawings were received on 3/28/2006. These drawings are accepted.

Specification

6. The abstract of the disclosure is objected to because "This invention provides a method" should be changed to --A method-- and "comprising" should be changed to --including--. Correction is required. See MPEP § 608.01(b).

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 4, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich).

11. As to claim 1, Racich discloses a method for producing a polarizing film (see at least figure 1 and the abstract), comprising: a dyeing step (see at least figure 1, element 20 as well as column 2, lines 50-68) and a stretching step (see at least column 3, line 53 through column 4, line 13), a plurality of films being dipped into at least one processing liquid without contacting each other (see at least figure 1, elements 10 and 66; it is noted that one of ordinary skill in the art of making light polarizer films appreciates that after the roll of the polyvinyl alcohol (PVA) is completely unrolled from roll 10 and rolled onto roll 66, the rolls *must* be removed and new rolls inserted in their place in order to perform the process again).

12. As to claim 4, Racich discloses a polarizing film obtained by the method of claim 1 (see at least section 11 of this office action).

13. As to claim 10, Racich discloses an apparatus for producing a polarizing film (see at least figure 1 and the abstract), comprising a processing bath (see at least figure 1, element 20 as well as column 2, lines 50-68) having a film delivery holder (see at least figure 1, elements 12, 14, 22, 24, 26, 28, 30 and 32) for dipping a plurality of films into at

least one processing liquid without contacting each other (see at least figure 1, elements 10 and 66; it is noted that one of ordinary skill in the art of making light polarizer films appreciates that after the roll of the polyvinyl alcohol (PVA) is completely unrolled from roll 10 and rolled onto roll 66, the rolls *must* be removed and new rolls inserted in their place in order to perform the process again).

14. As to claim 12, Racich discloses a total stretch ratio from 3.0 to 7.0 (see at least column 4, lines 8-11).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich).

19. As to claims 2 and 11, Racich does not explicitly disclose that the number of the films is 2 to 4.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to run any number of film rolls, including between 2 and 4, through the same dye bath and stretching step, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the number of films run through the same dye bath and stretching step be from 2 to 4, for the purpose of utilizing the production process of Racich to produce multiple films (*In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235*).

20. Claims 3, 5, 6, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich) in view of Kondo et al., U.S. Patent Application Publication Number 2002/0182427 A1 (hereafter Kondo).

21. As to claim 3, Racich discloses that the polarizer film is a polyvinylalcohol (PVA) dichroic film (see at least the abstract of Racich) which is dyed (see at least figure 1, element 20 as well as column 2, lines 50-68 of Racich) and then uniaxially stretched in the stretching step (see at least column 3, line 53 through column 4, line 13 of Racich).

Racich does not specifically disclose that the polyvinylalcohol film is dyed with a dichroic substance in the dyeing step.

However, Kondo teaches a PVA polarizing film that is dyed with a dichroic dyestuff (see at least paragraphs [0007], [0013] and [0027] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dyeing step of Racich to include the teachings of Kondo so that the PVA film is dyed with a dichroic substance in the dyeing step, for the purpose of increasing the dichroic effects of the PVA film.

22. As to claims 5, 6, 7, 8 and 9, Racich does not specifically disclose that an optical layer is provided on at least one side of the polarizing film or that the polarizing film is used in a liquid crystal panel or image display.

However, Kondo teaches a PVA polarizing film for use with a liquid crystal display (see at least paragraphs [0004], [0007] and [0014] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polarizing film of Racich to include the teachings of Kondo so that an optical layer is provided somewhere on at least one side of the polarizing film for the purpose of using the polarizing film in a liquid crystal panel or image display to improve contrast and polarize light viewed by the user.

It is noted that in claims 8 and 9, the limitations "produced by an in-house production method" are process limitations in a product claim (i.e. product by process) and are therefore not given any significant patentable weight as per MPEP 2113: *"Even though product-by-process claims are limited by and defined by the process,* determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

23. Claims 1-2, 4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich) in view of Nomura et al., U.S. Patent Number 4,324,480 (hereafter Nomura).

24. As to claim 1, Racich discloses a method for producing a polarizing film (see at least figure 1 and the abstract), comprising: a dyeing step (see at least figure 1, element 20 as well as column 2, lines 50-68) and a stretching step (see at least column 3, line 53 through column 4, line 13).

It is contended by the examiner that Racich supports all of the claimed limitations of claim 1, as set forth in section 11 of this office action. However, if applicant contends that Racich does not support a plurality of films being dipped into at least one processing liquid without contacting each other, the examiner has also set forth this rejection.

Nomura teaches a process of dipping a plurality of films into at least one processing liquid without contacting each other (see at least figure 1, the abstract and column 1, line 63 through column 3, line 26 of Nomura).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of producing a polarizing film of Racich to include the teachings of Nomura so that multiple rolls of PVA film are sequentially dipped into the at least one processing liquid of Racich without touching each other for the purpose of not overlapping the films which may cause tears, scratches or wrinkles in the films.

25. As to claim 4, Racich in view of Nomura discloses a polarizing film obtained by the method of claim 1 (see at least section 24 of this office action).

26. As to claim 10, Racich discloses an apparatus for producing a polarizing film (see at least figure 1 and the abstract), comprising a processing bath (see at least figure 1, element 20 as well as column 2, lines 50-68) having a film delivery holder (see at least figure 1, elements 12, 14, 22, 24, 26, 28, 30 and 32) for dipping a film into at least one processing liquid (see at least figure 1, elements 10 and 66).

It is contended by the examiner that Racich supports all of the claimed limitations of claim 10, as set forth in section 13 of this office action. However, if applicant contends that Racich does not support dipping a plurality of films into at least one processing liquid without contacting each other, the examiner has also set forth this rejection.

Nomura teaches a process of dipping a plurality of films into at least one processing liquid without contacting each other (see at least figure 1, the abstract and column 1, line 63 through column 3, line 26 of Nomura).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of producing a polarizing film of Racich to include the teachings of Nomura so that multiple rolls of PVA film are sequentially dipped into the at least one processing liquid of Racich without touching each other for the purpose of not overlapping the films which may cause tears, scratches or wrinkles in the films.

27. As to claim 12, Racich in view of Nomura discloses a total stretch ratio from 3.0 to 7.0 (see at least column 4, lines 8-11 of Racich).

28. As to claims 2 and 11, Racich in view of Nomura does not explicitly disclose that the number of the films is 2 to 4.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to run any number of film rolls, including between 2 and 4, through the same dye bath and stretching step, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. One would have been motivated to have the number of films run through the same dye bath and stretching step be from 2 to 4, for the purpose of utilizing the production process of Racich to produce multiple films (*In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235*).

29. Claims 3, 5, 6, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich) in view of Nomura et al., U.S. Patent Number 4,324,480 (hereafter Nomura) as applied to claims 1-2, 4 and 10-12 above, and further in view of Kondo et al., U.S. Patent Application Publication Number 2002/0182427 A1 (hereafter Kondo).

30. As to claim 3, Racich in view of Nomura discloses that the polarizer film is a polyvinylalcohol (PVA) dichroic film (see at least the abstract of Racich) which is dyed (see at least figure 1, element 20 as well as column 2, lines 50-68 of Racich) and then uniaxially stretched in the stretching step (see at least column 3, line 53 through column 4, line 13 of Racich).

Racich in view of Nomura does not specifically disclose that the polyvinylalcohol film is dyed with a dichroic substance in the dyeing step.

However, Kondo teaches a PVA polarizing film that is dyed with a dichroic dyestuff (see at least paragraphs [0007], [0013] and [0027] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dyeing step of Racich in view of Nomura to include the teachings of Kondo so that the PVA film is dyed with a dichroic substance in the dyeing step, for the purpose of increasing the dichroic effects of the PVA film.

31. As to claims 5, 6, 7, 8 and 9, Racich in view of Nomura does not specifically disclose that an optical layer is provided on at least one side of the polarizing film or that the polarizing film is used in a liquid crystal panel or image display.

However, Kondo teaches a PVA polarizing film for use with a liquid crystal display (see at least paragraphs [0004], [0007] and [0014] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polarizing film of Racich in view of Nomura to include the teachings of Kondo so that an optical layer is provided somewhere on at least one side of the polarizing film for the purpose of using the polarizing film in a liquid crystal panel or image display to improve contrast and polarize light viewed by the user.

It is noted that in claims 8 and 9, the limitations "produced by an in-house production method" are process limitations in a product claim (i.e. product by process) and are therefore not given any significant patentable weight as per MPEP 2113:

"Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S. C./
Examiner, Art Unit 2872
12/7/2008

/Arnel C. Lavarias/
Primary Examiner, Art Unit 2872